

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims have been amended as follows:

2. (Amended) The processor of Claim 1A processor having a plethysmograph waveform input resulting from light attenuated by body tissue with pulsing blood and a pulse recognition output providing information regarding pulses within said waveform input, said processor comprising:

a candidate pulse portion that determines a plurality of potential pulses within said waveform input;

a physiological model portion that determines the physiologically acceptable ones of said pulses; and further comprising

a portion that determines statistics of pulses with said waveform input.

8. (Amended) The processor of Claim 1A processor having a plethysmograph waveform input resulting from light attenuated by body tissue with pulsing blood and a pulse recognition output providing information regarding pulses within said waveform input, said processor comprising:

a candidate pulse portion that determines a plurality of potential pulses within said waveform input; and

a physiological model portion that determines the physiologically acceptable ones of said pulses, wherein said physiological model portion comprises a component that disregards ones of said potential pulses that are generally asymmetric.

9. (Amended) The processor of Claim 1-A processor having a plethysmograph waveform input resulting from light attenuated by body tissue with pulsing blood and a pulse recognition output providing information regarding pulses within said waveform input, said processor comprising:

a candidate pulse portion that determines a plurality of potential pulses within said waveform input; and

a physiological model portion that determines the physiologically acceptable ones of said pulses, wherein said physiological model portion comprises a component that disregards ones of said potential pulses that have a descending trend that is generally slower than a subsequent ascending trend.

11. (Amended) The processor of Claim 1A processor having a plethysmograph waveform input resulting from light attenuated by body tissue with pulsing blood and a pulse recognition output providing information regarding pulses within said waveform input, said processor comprising:

a candidate pulse portion that determines a plurality of potential pulses within said waveform input; and

a physiological model portion that determines the physiologically acceptable ones of said pulses, wherein said physiological model portion comprises a component that disregards ones of said potential pulses having a signal strength that differs from a short-term average signal strength by greater than a predetermined amount.

13. (Twice Amended) The method of Claim 12A method of recognizing pulses within a plethysmograph waveform resulting from light attenuated by body tissue with pulsing blood comprising the steps of:

identifying a plurality of potential pulses in said waveform;
comparing said potential pulses to a physiological pulse model to derive at least one physiologically acceptable pulse; and comprising the further step of
generating statistics for said at least one acceptable pulse.